ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Reference 4 MEMORANDUM

DATE: September 9, 1983

TO: Land Division File

FROM: David C. Jansen, DLPC/FOS-Central Region DCJ

SUBJECT: LPC #0418080l - DOUGLAS COUNTY - TUSCOLA/CABOT CORPORATION

Cabot hazardous waste facilities include: 1) hydrochloric acid waste storage tanks, 2) hydrochloric acid waste storage ponds (a 2-celled surface impoundment), 3) a chlorosilane vaporizer residue waste treatment scrubber, and 4) a deep well injection operation.

All liquid wastes generated at this facility are pumped into the surface impoundment and then disposed of by deep well injection. Quantities disposed are included in monthly UIC reports.

These wastes include: 1) hydrochloric acid, 2) surface water runoff from the process and product storage areas, 3) leachate from two former (pre-RCRA) disposal areas (see Attachment A), and 4) chlorosilane vaporizer residues which are reacted to form weak hydrochloric acid and silicon dioxide solids.

Only the hydrochloric acid wastes (D002--corrosive, pH less than 2.0) and vaporizer residues (D003--reactive) are considered hazardous wastes. Leachate and surface water runoff generated have been determined to be non-hazardous, i.e. pH is above 2.0 and less than 12.5. The pH of these wastes is the only hazard characteristic that needs to be considered in determining whether the wastes are hazardous.

The leachate is collected by clay tiles underneath the past disposal areas, which have the appearance of low, grassy mounds. The tiles drain to a concrete sump north of the northeast corner of the pond. It is then pumped to an adjacent fiberglass sump that also receives process and storage area runoff, and collected rainwater. From this sump, the water is pumped to a fiberglass tank at the west edge of the pond. This tank also receives waste hydrochloric acid, and the reacted chlorosilane vaporizer residues (weak hydrochloric acid and silicon dioxide). The contents of the tank are discharged to one cell of the pond. The other cell of the pond is kept at a low level for reserve capacity. Water in the pond is pumped to one of the two deep wells.

Before the installation of the injection well -- surface impoundment system, in 1967, acidic wastewater generated at Cabot was held in pits located east of the RCRA surface impoundment, i.e. the aforementioned past disposal areas. Seepage from these disposal areas and the RCRA

LPC #04180801 - Douglas County
Tuscola/Cabot Corporation

impoundment, and past spills and leaks on the plant grounds have probably been the causes of observed deterioration of local groundwater quality, according to a RCRA Monitoring Plan prepared by Bruce S. Yare and Associates, Inc. of Belleville, Illinois, and submitted to the USEPA in March, 1982. More information on groundwater quality is contained in an August 9, 1983, Subpart F inspection report.

A copy of Cabot's Superfund Section 103(c) notification form was received during the inspection (see attached).

It should be noted that prior to November 1980, Cabot accepted for disposal in their deep wells, nitric acid, zinc nitrate, trisodium phosphate, and aromatic solvent from R. R. Donnelley of Mattoon, Illinois, (averaging about 7200 gallons per month, see Special Waste Permit #997200), and up to 1.9 million gallons per month of waste from A. E. Staley of Decatur, Illinois. These wastes were not accepted after the RCRA effective date.

Several violations of the closure plan requirements were noted during the inspection. These are outlined in the attached letter.

At the end of the inspection, I complimented the men interviewed for the thoroughness of their RCRA program, and in particular for their safety and emergency programs.

DCJ/cp
Attachments
cc: DLPC/FOS, Central Region
R. Stone/U.S.E.P.A., Region V

Notification of Hazardous Waste Site **Side Two**

F Waste Quantity.

Place an X in the appropriate boxes to indicate the facility types found at the site

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres

Facility Type

1 ☐ Piles
2 ☐ Land Treatment
3 ☐ Landfill
4 ☐ Tanks
5 ☐ Impoundment
6 ☐ Underground Injection
7 ☐ Drums, Above Ground
8 ☒ Drums, Below Ground
9 ☐ Other (Specify) _____

Total Facility Waste Amount

cubic feet _____

gallons _____

Total Facility Area

square feet _____

acres _____

G Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment ☐ Known ☐ Suspected ☐ Likely ☒ None

Note: Items H and I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

H Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.

I Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions

Previously Cabot Corporation disposed waste $SiCl_4$ and other acid materials in drums in a field. Almost all drums have been collected and properly disposed. A waste water lagoon now covers part of the old field. A Small, but uncertain number of drums (perhaps as many as 50) are buried in up to four locations. Groundwater monitoring in the area has shown no contamination.

J Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required to notify check "Other."

Name Donald J. Robinson

Street 125 High Street

City Boston State MA Zip Code 02110

Signature [signature] Date 8 June 1981

☒ Owner, Present
☐ Owner, Past
☐ Transporter
☒ Operator, Present
☐ Operator, Past
☐ Other

Douglas Co. - S.F.

Tuscola Region V, Chicago

EPA Notification of Hazardous Waste Site

United States
Environmental Protection
Agency
Washington DC 20460

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 9, 1981.

Please type or print in ink. If you need additional space, use separate sheets of [illegible] the letter of the item

810609 [illegible] ILS 000-Col-088

A Person Required to Notify:

Enter the name and address of the person or organization required to notify

Name: Cabot Corporation

Street: 125 High Street

City: Boston State: MA Zip Code: 02110

B Site Location:

Enter the common name (if known) and actual location of the site

Name of Site: Cab-O-Sil

Street: U.S. Rte. 36 East

ILD042075333

City: Tuscola County: Douglas State: IL Zip Code: 61953

C Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form

Name (Last, First and Title): Reznek, Steven (Corporate Pollution Control Manager)

Phone: (617) 423-6000

D Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year): 1958 To (Year): 1977

E Waste Type: Choose the option you prefer to complete

Option 1: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item I—Description of Site.

General Type of Waste:
Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

1. ☐ Organics
2. ☒ Inorganics
3. ☐ Solvents
4. ☐ Pesticides
5. ☐ Heavy metals
6. ☐ Acids
7. ☐ Bases
8. ☐ PCBs
9. ☐ Mixed Municipal Waste
10. ☐ Unknown
11. ☐ Other (Specify)

_____
_____
_____

Source of Waste:
Place an X in the appropriate boxes.

1. ☐ Mining
2. ☐ Construction
3. ☐ Textiles
4. ☐ Fertilizer
5. ☐ Paper/Printing
6. ☐ Leather Tanning
7. ☐ Iron/Steel Foundry
8. ☒ Chemical, General
9. ☐ Plating/Polishing
10. ☐ Military/Ammunition
11. ☐ Electrical Conductors
12. ☐ Transformers
13. ☐ Utility Companies
14. ☐ Sanitary/Refuse
15. ☐ Photofinish
16. ☐ Lab/Hospital
17. ☐ Unknown
18. ☐ Other (Specify)

_____
_____
_____

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:
EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located

000106 JUN-881

Form Approved
OMB No. 2050-0138
EPA Form 8400-1

JUN 11 1981